

Intermec RFID Demo

User Guide

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There are U.S. and foreign patents as well as U.S. and foreign patents pending.

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Before You Begin

This section provides you with safety information, technical support information, and sources for additional product information.



Note: Notes either provide extra information about a topic or contain special instructions for handling a particular condition or set of circumstances.

Global Services and Support

Warranty Information

To understand the warranty for your Intermec product, visit the Intermec website at www.intermec.com and click **Support > Returns and Repairs > Warranty**.

Web Support

Visit the Intermec website at www.intermec.com to download our current manuals (in PDF).

Visit the Intermec technical knowledge base (Knowledge Central) at www.intermec.com and click **Support > Knowledge Central** to review technical information or to request technical support for your Intermec product.

Send Feedback

Your feedback is crucial to the continual improvement of our documentation. To provide feedback about this manual, please contact the Intermec Technical Communications department directly at TechnicalCommunications@intermec.com.

Telephone Support

In the U.S.A. and Canada, call **1-800-755-5505**.

Outside the U.S.A. and Canada, contact your local Intermec representative. To search for your local representative, from the Intermec website, click **About Us > Contact Us**.

Who Should Read This Manual

This *Intermec RFID Demo User Guide* is for the person who is using responsible for demonstrating the functions and features of the Intermec RFID Demo application.

Related Documents

Here are some key related Intermec documents (not limited to this list) that you might find useful:

- *70 Series Mobile Computer User Manual*
- *BRI Programmer's Reference Manual*
- *IP30 Handheld RFID Reader User Guide*

The Intermec website at www.intermec.com contains our documents (as .pdf files) that you can download for free.

To download documents

- 1** Visit the Intermec website at www.intermec.com.
- 2** Click the **Products** tab.
- 3** Using the **Products** menu, navigate to your product page. For example, to find the CK70 computer product page, click **Computers > Handheld Computers > CK70**.
- 4** Click the **Manuals** tab.

If your product does not have its own product page, click **Support > Manuals**. Use the **Product Category**, the **Product Family**, and **Product** to find your documentation.

1

Read a Tag

Use this chapter to learn about the following topics:

- **About Intermec RFID Demo**
- **Configure the Read Settings**
- **How to Read Tags**

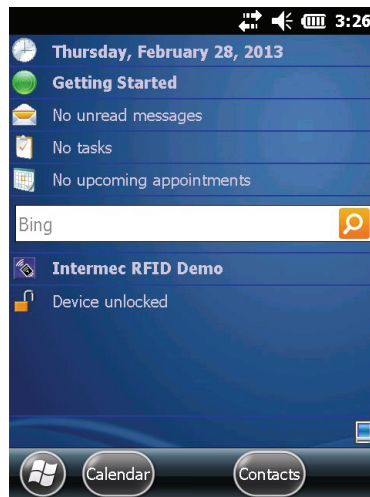
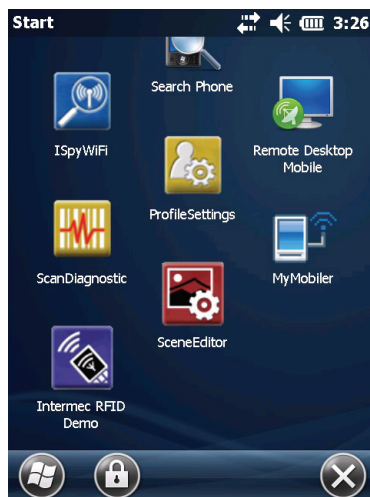
About Intermec RFID Demo

You can use the Intermec RFID Demo to perform these tasks on the IP30 or the 70 Series RFID-enabled computers to read RFID tags, and write data to RFID tags. The RFID Demo comes installed on the 70 Series RFID-enabled mobile computers. For mobile computers that support the IP30 handheld RFID reader, you need to download the Intermec RFID Demo onto your computer. For existing customers, you must download this Intermec RFID Demo from the Intermec download web page at www.intermec.com > **Support** > **Downloads**.

Supported Computers

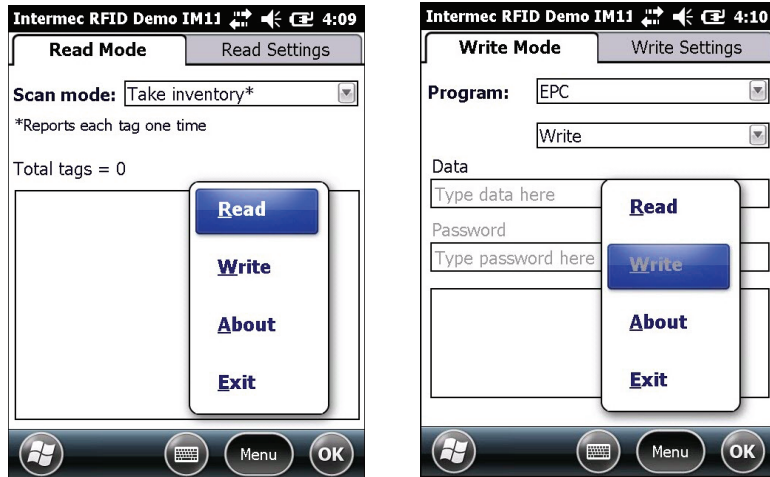
You can use the Intermec RFID Demo with any Intermec RFID-enabled mobile computer, including mobile computers that use the IP30. You can launch the Intermec RFID Demo from the Start or Home screen of the 70 Series RFID-enabled computers.

The Start Screen and the Home Screen



Read and Write Modes

The Intermec RFID Demo offers two modes: Read and Write.



The Read Mode allows you to select several Scan mode options. For more information, see the next section, **“Configure the Read Settings.”** The Write Mode allows you to select what to write and from what program. For more information, refer to **“Configure the Write Settings” on page 20.**

Configure the Read Settings

You can configure the following Read Settings:

- RF Field Strength
- Format
- Log data
- Enable tag read beep
- Enable search sound
- Decode tag data
- Define data field to read
- Use filter

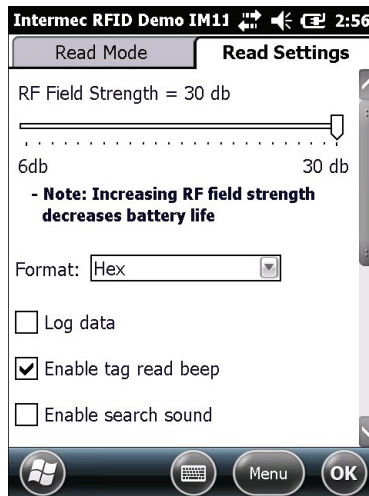
Adjust the RF Field Strength

The RF Field Strength is the RFID power level you use to read tags. Increasing the level of the RF Field Strength increases the range for reading a tag, but it will decrease battery life. The change you make on the Read Settings screen is only temporary.

The default value of the RF Field Strength is 30 dB. You can change the default setting from the Start screen: **Settings > System > Intermec Settings > RFID > Reader 1 > RFID Module**. For help, see the mobile computer user manual.

To temporarily adjust the level of the RF Field Strength

- 1 If you already launched the Intermec RFID Demo, continue with Step 2. If not, from the Start or Home screen, tap **Intermec RFID Demo**.
- 2 Tap the **Read Settings** tab.



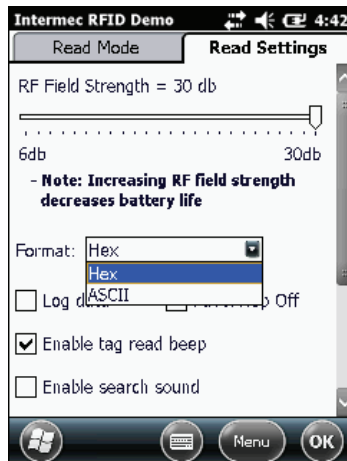
- 3 Adjust the **RF Field Strength** slider bar to the power level you want to read tags with.

Select the Tag Data Format

You can use the Intermec RFID Demo to specify the format of the data on the tags.

To select the tag data format

- 1 If you already launched the Intermec RFID Demo, continue with Step 2. If not, from the Start or Home screen, tap **Intermec RFID Demo**.
- 2 Tap the **Read Settings** tab.
- 3 From the **Format** drop-down menu, select **Hex** or **ASCII**.

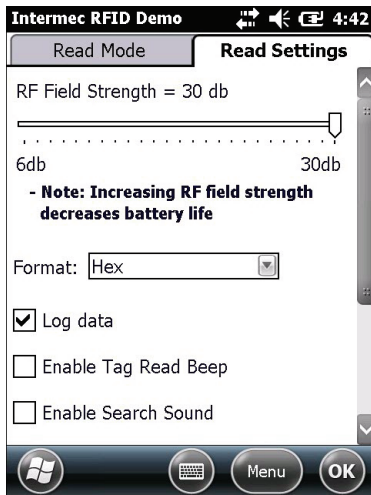


Log the Data for Tags You Read

You can enable the Intermec RFID Demo to log and save information about the tags you read. The log data is saved to the file TagReadData.txt. You can access this log data file by tapping **File Explorer** on the Start screen, then tap **Program Files > RFIDDemo**.

To log read tag data

- 1 If you already launched the Intermec RFID Demo, continue with Step 2. If not, from the Start or Home screen, tap **Intermec RFID Demo**.
- 2 Tap the **Read Settings** tab.
- 3 Select the **Log data** check box.



Enable the Tag Read Beep

You can enable your computer to beep each time when it finds an RFID tag.

To enable tag read beep

- 1 If you already launched the Intermec RFID Demo, continue with Step 2. If not, from the Start or Home screen, tap **Intermec RFID Demo**.
- 2 Tap the **Read Settings** tab.
- 3 Select the **Enable Tag Read Beep** check box.

Enable a Search Sound

Enabling the Search Sound allows the computer to beep each time it finds an RFID tag. This feature is especially useful when using Locate Tag on the **Read Mode** tab. For help, see [“Locate a Tag” on page 14](#).

To enable a search sound

- 1 If you already launched the Intermec RFID Demo, continue with Step 2. If not, from the Start or Home screen, tap **Intermec RFID Demo**.
- 2 Tap the **Read Settings** tab.
- 3 Select the **Enable Search Sound** check box.

Enable the Option to Decode Tag Data

Tag EPC values can be encoded in a number of data formats, for example, SSCC96, or SGIN-96. If the tag data is encoded, the application decodes that data when reading the RFID tags. The Intermec RFID Demo does not encode tag data on the Write screen.

To enable the computer to decode tag data

- 1 From the Start or Home screen, tap **Intermec RFID Demo**.
- 2 Tap the **Read Settings** tab.
- 3 Select the **Decode tag data** check box.

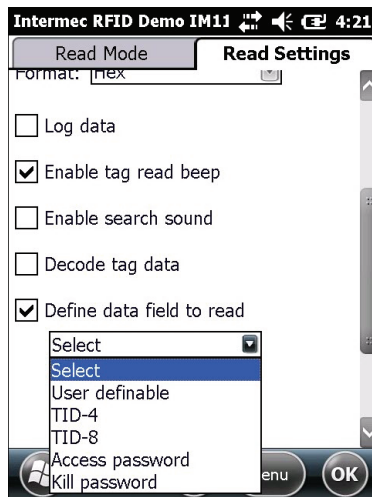
Define a Data Field to Read

When defining the data field for a tag, you can specify what data appears each time you read the tag. For a specific tag, you can choose to view the following options:

- User definable
- TID-4
- TID-8
- Access password
- Kill password

To define a data field

- 1 If you already launched the Intermec RFID Demo, continue with Step 2. If not, from the Start or Home screen, tap **Intermec RFID Demo**.
- 2 Tap the **Read Settings** tab.
- 3 Select the **Define data field to read** check box and select a data field type from the drop-down menu.



For information about Access or Kill password, see the [*BRI Programmer Reference Manual*](#).

Enable the Option to Use ASCII EPC Filter

In situation such as demonstrating the computer to read a specific subset of tags in an environment with many tags, such as a lab or trade show environment, you can enable the system to filter on tags that have an ASCII EPC code beginning with a “1” and having exactly 12 ASCII characters including the 1. Remember that the ASCII EPC code can include spaces, but cannot end with a space. See sample ASCII EPC codes below:

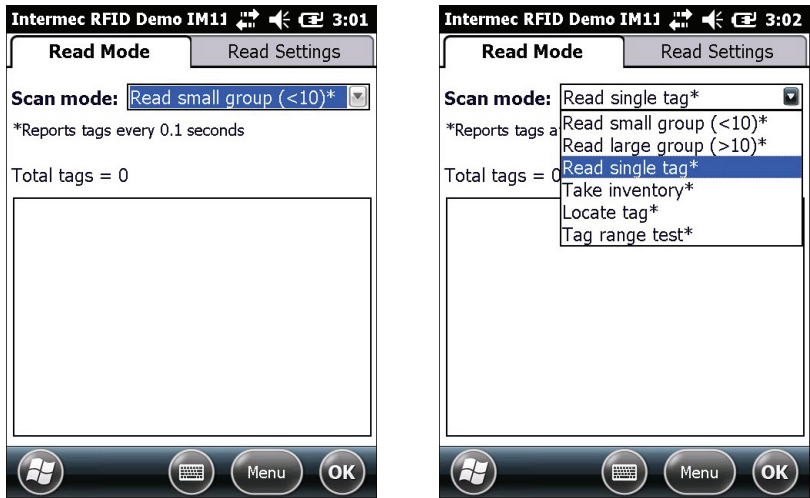
- Valid entry: 1abcf wz1234
- Invalid entries: 2abcf wz1234, zabcf wz1234, 1abcf wz123(space)

To enable the option to use ASCII EPC Filter

- 1** If you already launched the Intermec RFID Demo, continue with Step 2. If not, from the Start or Home screen, tap **Intermec RFID Demo**.
- 2** Tap the **Read Settings** tab.
- 3** Select the **Use filter** check box.

How to Read Tags

The Intermec RFID Demo allows you to read RFID tags by selecting various scan modes.



There are six options under Scan mode.

Scan Mode Options

Scan Mode	Description
Read small group (<10)*	Reports tags every 0.1 seconds.
Read large group (>10)*	Reports tags every 1 second.
Read single tag*	Reports tags at very close range.
Take inventory*	Reports each tag one time.
Locate tag*	Locates tag with the specified EPC number.
Tag range test*	Tests the read range of the test tag.

Read a Single Tag

You can use the Intermec RFID Demo to read a single tag. This method of reading reduces the output power so that the computer can attempt to read a specific tag without picking up other nearby tags that may typically be picked up at higher power.

To read a single tag once

- 1 If you already launched the Intermec RFID Demo, continue with Step 2. If not, from the Start or Home screen, tap **Intermec RFID Demo**.
- 2 From the **Scan mode** drop-down menu, select **Read single tag**.
- 3 Position the computer an inch away from the tag.



Note: By default, the system automatically adjusts the power down when selecting the option of Read single tag.

- 4 Scan the tag:
 - Pull and hold the trigger (IP30) or the scan handle, or
 - Press and hold the **Scan** button.

If the read is successful, a table appears and displays the EPC value of the tag.

Intermec RFID Demo IM11 3:03

Read Mode Read Settings

Scan mode: Read single tag*

*Reports tags at very close range

Total Tags = 1

EPC ID	Count	RD Fiel
0000000000000000AD77130	1	

Windows Keyboard Menu OK

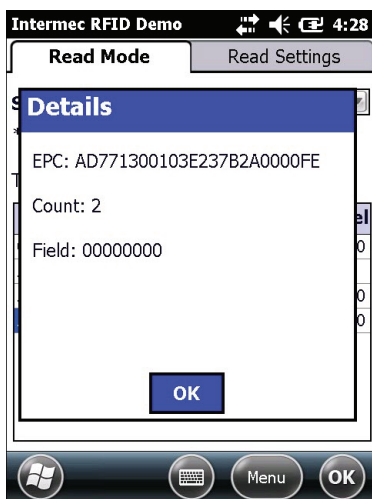
- 5 (Optional) To view more details about the tag, see **“View Tag Field Details” on page 12**.

View Tag Field Details

Based on the selection of the data field of the Read Settings screen, you can view the following information about a tag in any read mode: User definable, TID-4, TID-8, Access password, or Kill password.

To view tag field detail

- 1 Specify which data field you want to view. For help, see [“Define a Data Field to Read” on page 8](#).
- 2 Read a tag. For help, see [“How to Read Tags” on page 10](#).
- 3 Double-tap the **EPC ID** to view details about a specific tag. The **Details** dialog box appears.

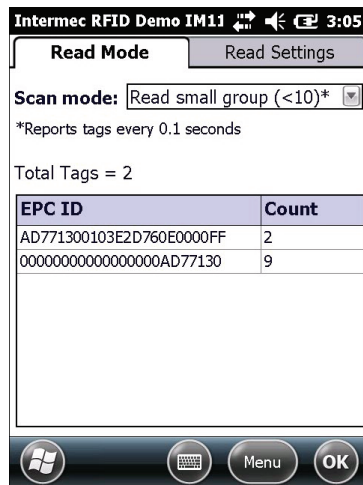


Read a Small Group of Tags

You can use the Intermec RFID Demo to read a small group of tags. This feature allows the computer to efficiently read a small group of tags versus a much larger tag group of more than 10 tags.

To read a small group of tags

- 1 If you already launched the Intermec RFID Demo, continue with Step 2. If not, from the Start or Home screen, tap **Intermec RFID Demo**.
- 2 From the **Scan mode** drop-down menu, select **Read small group (<10)**.
- 3 Scan the tags continuously:
 - Pull and hold the trigger (IP30) or the scan handle, or
 - Press and hold the **Scan** button.
- 4 If the read is successful, a table appears and displays the EPC value of each tag.



- 5 (Optional) To view more details about the tag, see the previous section, **“View Tag Field Details.”**

Read a Large Group of Tags

You can use the Intermec RFID Demo to read a large group of tags. This feature allows you to test how efficiently the RFID reader can repeatedly read individual tags in a large group of tags.

To read a large group of tags

- 1 If you already launched the Intermec RFID Demo, continue with Step 2. If not, from the Start or Home screen, tap **Intermec RFID Demo**.
- 2 From the **Scan mode** drop-down menu, select **Read large group (>10)**.
- 3 Scan the tags continuously:
 - Pull and hold the trigger (IP30) or the scan handle, or
 - Press and hold the **Scan** button.
- 4 If the read is successful, a table appears and displays the EPC value of the tag.
- 5 (Optional) To view more details about the tag, see [“View Tag Field Details” on page 12](#).

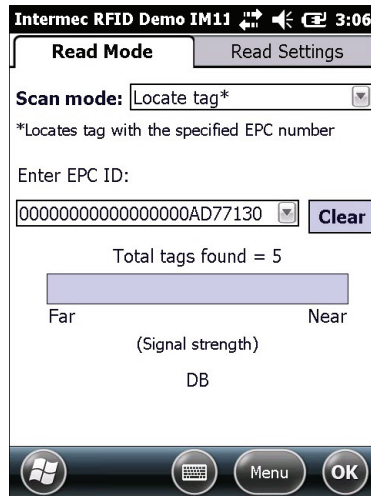
Locate a Tag

You can use the Intermec RFID Demo to select and search for a single tag or a specific tag among a group of tags.

To locate a tag

- 1 If you already launched the Intermec RFID Demo, continue with Step 2. If not, from the Start or Home screen, tap **Intermec RFID Demo**.
- 2 From the **Scan mode** drop-down menu, select **Locate a tag**.
- 3 Scan a group of tags:
 - Pull and hold the trigger (IP30) or the scan handle, or
 - Press and hold the **Scan** button.

The system displays the number of tags found and all of the tags in a certain radius are displayed in the **Enter EPC ID** field.



- 4 From the **Enter EPC ID** drop-down menu, select the EPC value you want to locate.
- 5 To locate a tag, press the **Scan** button and hold it. The screen will give visual indicators of the distance between the tag and the computer.
 - The Far to Near visual indicator shows you the distance the tag is located from the computer.
 - The value of the Signal Strength changes based on the distance to the tag. Higher number refers to a farther distance to the tag. Lower number refers to a closer distance to the tag.
- 6 (Optional) Tap **Clear** to locate a tag from another group of tags. The list from the **Enter EPC ID** drop-down list disappears. Repeat Steps 1 through 4.

For each tag you want to locate in the list, repeat Steps 1 through 6 and select a different EPC value each time.

Take Inventory

Inventory mode allows you to scan a group of tags and display them one time each. By default, the application is set to read a large group of tags (like you are taking inventory).

To take inventory

- 1 If you already launched the Intermec RFID Demo, continue with Step 2. If not, from the Start or Home screen, tap **Intermec RFID Demo**.
- 2 From the **Scan mode** drop-down menu, select **Take inventory**.
- 3 Scan a group of tags:
 - Pull and hold the trigger (IP30) or the scan handle, or
 - Press and hold the **Scan** button.
- 4 If the read is successful, a table appears and shows the EPC value of each tag.



Note: When performing multiple inventory reads, wait several seconds (i.e. more than 5 seconds) to allow the tags time to clear the session state. This avoids the possibility of missing some tags.

Perform a Tag Range Test

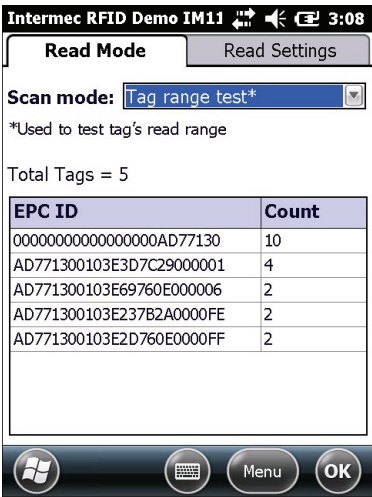
Use this mode to determine the read range for a tag or the RF pattern on the scanner.

To perform a tag range test

- 1 If you already launched the Intermec RFID Demo, continue with Step 2. If not, from the Start or Home screen, tap **Intermec RFID Demo**.
- 2 From the **Scan mode** drop-down menu, select **Tag range test**.
- 3 Scan a tag continuously while walking towards it. To scan a tag:
 - Pull and hold the trigger (IP30) or the scan handle, or
 - Press and hold the **Scan** button.

As you walk towards or away from the tag, you can evaluate how far away you can be to read the tag.

- 4 If the read is successful, a table appears and shows the EPC value of each tag.



- 5 (Optional) Modify the RF power level and repeat Steps 1 through 3. For more information, see **“Adjust the RF Field Strength” on page 4**.
- 6 (Optional) You can view field detail information of a tag from any read mode.

2

Write a Tag

Use this chapter to learn about the following topics:

- **Configure the Write Settings**
- **How to Write to a Tag**

Configure the Write Settings

You can choose the following Write Settings:

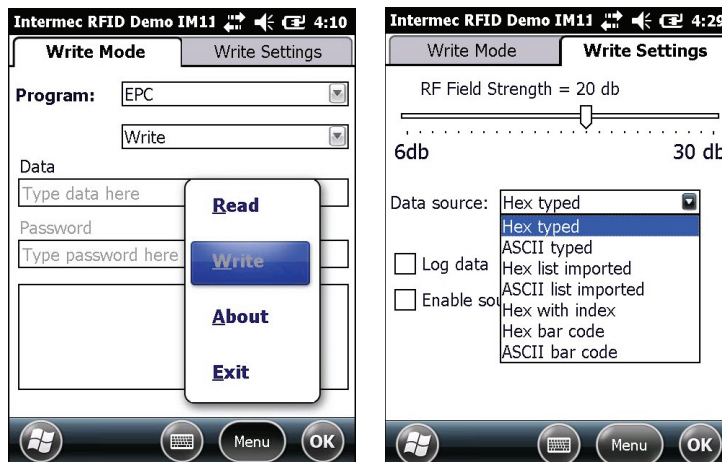
- RF Field Strength
- Data source
- Log data
- Enable sound

Set the Encoding Method to Write a Tag

When you write a tag, the data you specify for the tag is encoded with the data source method you specified.

To set the encoding method to write a tag

- 1 If you already launched the Intermec RFID Demo, continue with Step 2. If not, from the Start or Home screen, tap **Intermec RFID Demo**.
- 2 Tap **Menu** > **Write**.
- 3 Tap the **Write Settings** tab.



- 4 From the **Data source** drop-down menu, select the encoding method you want to use for writing a tag.

Log the Write Tag Data

You can enable the Intermec RFID Demo to log and save information about the tags you write.

To log write tag data

- 1 If you already launched the Intermec RFID Demo, continue with Step 2. If not, from the Start or Home screen, tap **Intermec RFID Demo**.
- 2 Tap **Menu > Write**.
- 3 Tap the **Write Settings** tab.
- 4 Select the **Log data** check box.

Enable a Write Sound

You can enable the computer to beep each time the application writes to a tag.

To enable sound

- 1 If you already launched the Intermec RFID Demo, continue with Step 2. If not, from the Start or Home screen, tap **Intermec RFID Demo**.
- 2 Tap **Menu > Write**.
- 3 Tap the **Write Settings** tab.
- 4 Select the **Enable sound** check box.

How to Write to a Tag

You can use the Intermec RFID Demo to demonstrate how to write to an RFID tag. Types of data you can write to a tag are:

- EPC
- User Memory
- Access Password
- Kill Password

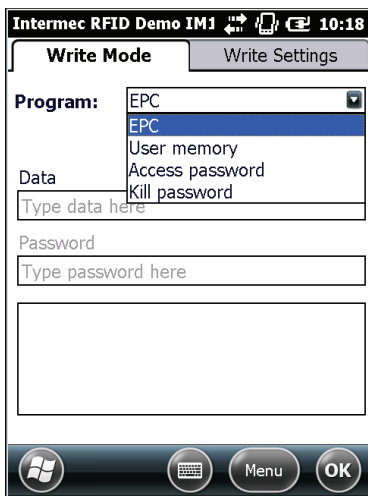
You can also use the Intermec RFID Demo to protect data that you write to a tag.

Write the EPC Value

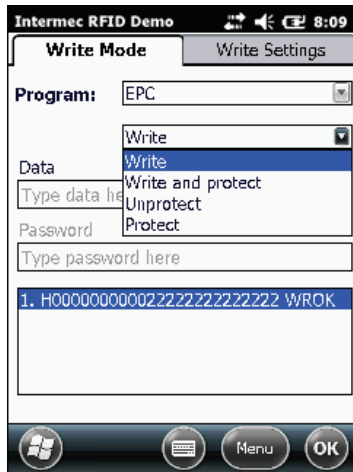
You can use the Intermec RFID Demo to write the electronic product code (EPC) of an RFID tag.

To write the EPC Value

- 1 If you already launched the Intermec RFID Demo, continue with Step 2. If not, from the Start or Home screen, tap **Intermec RFID Demo**.
- 2 Tap **Menu** > **Write** and then tap the **Write Settings** tab. Set the encoding method for writing the tag. For help, see [“Set the Encoding Method to Write a Tag” on page 20](#).
- 3 Tap the **Write Mode** tab and select **EPC** from the **Program** drop-down menu.



- 4 Select **Write** from the next drop-down menu.



- 5 In the **Data** field, enter an EPC value. The EPC value must be an even number of bytes.

EPC values are typically 96-bits long. If you enter a shorter data string, the application adds zeros until the string is 96-bits long.



Note: If you want to protect the EPC so it cannot be overwritten, select **Protect** or **Write and protect** from the drop-down menu, for more information, see [“Protect a Tag” on page 27](#).

- 6 Scan a tag:
- Pull and hold the trigger (IP30) or the scan handle, or
 - Press and hold the **Scan** button.
- 7 View the results of the write.
- If the write is successful, a table displays the EPC value of the tag and a “WROK” (Write OK) message.
 - If the write is unsuccessful, a table displays the EPC value of the tag with an error. For a list of errors, see [“About the Write Error Messages” on page 36](#).
- 8 (Optional) To verify that the EPC value was written successfully, read the tag. For help, see [“Read a Single Tag” on page 11](#).

Write to the User Memory

You can use the Intermec RFID Demo to write to the user memory of an RFID tag. The user memory allows you to store any data you want to associate with a tag. The length of the data you can enter depends on the memory bank you select to program in.

To write the user memory

- 1 If you already launched the Intermec RFID Demo, continue with Step 2. If not, from the Start or Home screen, tap **Intermec RFID Demo**.
- 2 Tap **Menu** > **Write** and then tap the **Write Settings** tab. Set the encoding method for writing the tag. For help, see [“Set the Encoding Method to Write a Tag” on page 20](#).
- 3 Tap the **Write Mode** tab.
- 4 Select **User memory** from the **Program** drop-down menu.
- 5 Select **Write** from the drop-down menu.



Note: If you want to protect the user memory so it cannot be overwritten, select **Protect** or **Write and protect** from the drop-down menu. For more information, see [“Protect a Tag” on page 27](#).

- 6 In the **Data** field, enter the data for the user memory. The user memory must have an even number of bytes/characters.
- 7 Scan a tag:
 - Pull and hold the trigger (IP30) or the scan handle, or
 - Press and hold the **Scan** button.
- 8 View the results of the write.
 - If the write is successful, a table displays the EPC value of the tag and a “MEMOVRN” (memory overrun) message.
 - If the write is unsuccessful, a table displays the EPC value of the tag with an error. For a list of errors, see [“About the Write Error Messages” on page 36](#).

Write the Access Password

You can use the Intermec RFID Demo to write the access password for an RFID tag. The access password allows you to protect the EPC value on a tag so it cannot be overwritten.

To write the access password

- 1 If you already launched the Intermec RFID Demo, continue with Step 2. If not, from the Start or Home screen, tap **Intermec RFID Demo**.
- 2 Tap **Menu** > **Write** and then tap the **Write Settings** tab. Set the encoding method for writing the tag. For help, see [“Set the Encoding Method to Write a Tag” on page 20](#).
- 3 Tap the **Write Mode** tab.
- 4 Select **Access password** from the **Program** drop-down menu.
- 5 Select **Write** from the drop-down menu.



Note: If you want to protect the access password so it cannot be overwritten, select **Write** or **Write and protect** from the drop-down menu, see [“Protect a Tag” on page 27](#).

- 6 In the **Data** field, enter the data for the access password. The user memory must be:
 - a hex formatted data string
 - 4-bytes long.
- 7 Write to a tag:
 - Pull and hold the trigger (IP30) or the scan handle, or
 - Press and hold the **Scan** button.
- 8 View the results of the write.
 - If the write is successful, a table displays the EPC value of the tag and a “WROK” (means Write OK) message.
 - If the write is unsuccessful, a table displays the EPC value of the tag with an error. For a list of errors, see [“About the Write Error Messages” on page 36](#).

- 9 (Optional) To verify that the access password was written successfully to the tag:
 - a Set the application to read the access password. For help, see [“Define a Data Field to Read” on page 8](#).
 - b Read the tag. For help, see [“Read a Single Tag” on page 11](#).
 - c View the tag details field. For help, see [“View Tag Field Details” on page 12](#).

Write the Kill Password

You can use the Intermec RFID Demo to write the kill password for an RFID tag.

To write the kill password

- 1 If you already launched the Intermec RFID Demo, continue with Step 2. If not, from the Start or Home screen, tap **Intermec RFID Demo**.
- 2 Tap **Menu** > **Write** and then tap the **Write Settings** tab. Set the encoding method for writing the tag. For help, see [“Set the Encoding Method to Write a Tag” on page 20](#).
- 3 Tap the **Write Mode** tab and select **Kill password** from the **Program** drop-down menu.
- 4 Select **Write** from the drop-down menu.



Note: If you want to protect the kill password so it cannot be overwritten, select **Write** or **Write and protect** from the drop-down menu. For more information, see [“Protect a Tag” on page 27](#).

- 5 In the **Data** field, enter the data for the kill password. The data must be:
 - a hex formatted data string
 - 4-bytes long.
- 6 Scan a tag:
 - Pull and hold the trigger (IP30) or the scan handle, or
 - Press and hold the **Scan** button.

- 7 View the results of the write.
 - If the write is successful, a table displays the EPC value of the tag and a “WROK” (Write OK) message.
 - If the write is unsuccessful, a table displays the EPC value of the tag with an error. For a list of errors, see **“About the Write Error Messages” on page 36.**
- 8 (Optional) To verify that the kill password was written successfully:
 - a Set the application to read the kill password. For help, see **“Define a Data Field to Read” on page 8.**
 - b Read the tag. For help, see **“Read a Single Tag” on page 11.**
 - c View the tag details field. For help, see **“View Tag Field Details” on page 12.**

Protect a Tag

You can use the Intermec RFID Demo to protect an EPC value, user memory, access password, or kill password you have written to a tag. You must first program and protect the access password in order to perform this procedure.

To protect a tag

- 1 If you already launched the Intermec RFID Demo, continue with Step 2. If not, from the Start or Home screen, tap **Intermec RFID Demo**.
- 2 Tap **Menu > Write**. The **Write Mode** tab appears.
- 3 From the **Program** drop-down menu, select one of the following:
 - EPC
 - User memory
 - Access password
 - Kill password
- 4 From the drop-down menu, select **Protect**.
- 5 In the **Data** field, enter the access password you recently programmed. The password must be 4 bytes.

- 6 Scan the tag:
 - Pull and hold the trigger (IP30) or the scan handle, or
 - Press and hold the **Scan** button.
- 7 View the results of the write.
 - If the write is successful, a table displays the data value and a “Write OK” message.
 - If the write is unsuccessful, a table displays the data value with an error. For a list of errors, see **“About the Write Error Messages” on page 36**.
- 8 (Optional) To verify that the tag was protected successfully:
 - a Set the application to read the data you just protected. For help, see **“Define a Data Field to Read” on page 8**.
 - b Read the tag. For help, see **“Read a Single Tag” on page 11**.
 - c View the tag details field. For help, see **“View Tag Field Details” on page 12**.

Unprotect a Tag

If you have protected data in a tag, you can use the Intermec RFID Demo to unprotected an EPC value, user memory, access password, or kill password. You must first program and protect the access password in order to perform this procedure.

To unprotect tag data

- 1 If you already launched the Intermec RFID Demo, continue with Step 2. If not, from the Start or Home screen, tap **Intermec RFID Demo**.
- 2 Tap **Menu > Write**. The **Write Mode** tab appears.
- 3 From the **Program** drop-down menu, select one of the following:
 - EPC
 - User memory
 - Access password
 - Kill password
- 4 From the drop-down menu, select **Unprotect**.

- 5** In the **Data** field, enter the password you used to protect the tag data.
- 6** Scan the tag:
 - Pull and hold the trigger (IP30) or the scan handle, or
 - Press and hold the **Scan** button.
- 7** View the results of the write.
 - If the write is successful, a table displays the data value and a “Write OK” message.
 - If the write is unsuccessful, a table displays the data value with an error. For a list of errors, see **“About the Write Error Messages” on page 36**.
- 8** (Optional) Verify that the tag was unprotected successfully.
 - Write to the tag. For help, see **“How to Write to a Tag” on page 21**.

If the application can write to the tag without a password, the tag has been successfully unprotected.

3

Troubleshooting

Use this chapter to learn about the following topics:

- **Troubleshooting**
- **About the Write Error Messages**

Troubleshooting

Use this section to troubleshoot problems that may prevent you from using the Intermec RFID Demo application.

Problems Using RFID Demo Application


Problem	Solution
Intermec RFID Demo fails to start.	<p>If the Intermec RFID Demo does not start or connect to the reader, make sure you:</p> <ul style="list-style-type: none">• verify the IP30 battery is fully charged and properly seated.• verify RFID is enabled.• reboot your mobile computer. <p>Three ways to verify if RFID is enabled:</p> <ul style="list-style-type: none">• from the Start screen, tap Settings > Connections > Wireless Center• from the Title bar on the Home screen• from the Intermec Settings. <p>For more information, see “Verify if RFID is enabled” on page 33.</p> <p>If all of the above options look OK, and the RFID Demo still fails to start, or the reader shows up as not connected under Reader 1, then you need to try a warm boot of the computer. Press the Power button and select Reboot from the menu. The computer systematically shuts down, restarts, and goes through the initialization process.</p>
Intermec RFID Demo does not read tag.	<p>If the Intermec RFID Demo does not read tags, perform the following steps to resolve the issue:</p> <p>To fix the issue of Intermec RFID Demo not reading tags:</p> <ol style="list-style-type: none">1 Verify that the tag works.2 Verify that you are either holding the tag properly or that the tag is mounted properly.<p>For example, a metal mount tag will not work properly unless it is mounted on metal. If you hold a tag in your hand you can detune it and it will not work properly.</p>3 Move the computer in the right position or angle to avoid some dead spots or possible interference.4 Verify that reader settings are properly configured within Intermec Settings for RFID.<p>For example, if you enter a too low value for the Field Strength dB you may not be able to read tags.</p>

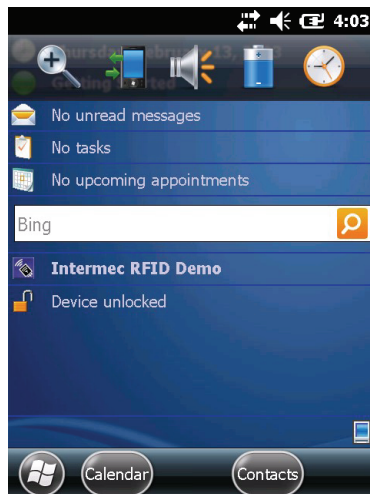
Verify if RFID is enabled

Three ways to verify if RFID is enabled:

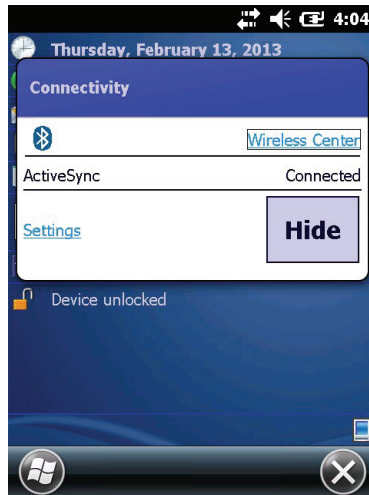
- Verify if RFID is enabled from the Start screen. Tap **Settings > Connections > Wireless Center**



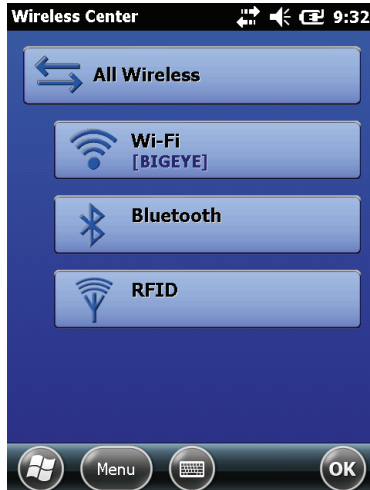
- Verify if RFID is enabled from the Title bar on the Home screen.
 - a Tap the Wi-Fi connection icon () on the title bar. The system displays more icons.



- b Tap the **Connectivity** icon () to view the Connectivity screen.



- c Tap the **Wireless Center** link to view the Wireless Center screen.



- Verify if RFID is enabled from the Intermec Settings.
 - a On the Intermec Settings Main Menu screen, tap the vertical bar down to RFID.



- b For Windows Embedded Handheld 6.5, tap **RFID > Enable RFID Service** and verify that RFID is enabled.



- c Tap Reader 1 on the **Intermec Settings > RFID > Reader 1** screen and verify that Reader Model selection is IM11.



About the Write Error Messages

The following Error Messages table list error messages that appear when you attempt to program a tag:

Error Messages

Message	Description
WRERR	Failed to write tag. The tag was found, but failed for an unknown reason.
PWERR	Failed to write tag because power was too low.
PVERR	Failed to write tag because the tag is password protected. You did not enter a password, or entered an incorrect password.
MEMOVRN	Attempted to write to memory that does not exist in the specified tag.
No Tag Found!	The computer cannot find or read the tag.



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